

ABSTRACT

A method for establishing wireless communication between a transmitter and a receiver in a wireless communication system. The receiver includes an adaptive array that has at least two antennas. Each antenna receives a signal and produces a received signal. The transmitter includes at least two transmission channels for communicating the signal from the transmitter to the receiver. The wireless communication system suppresses interference at the receiver by applying an interference suppression technique when combining the received signals. The selection of a channel at the transmitter is based on the channel performance at the receiver for each transmission channel. The channel performance is based on a combining technique different from the interference suppression technique.

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